AP Stat- Boxplot Exploration- Ch. 5 NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Get lists BLK1, BLK2, BLK3: These are the quiz scores for three classes. Quizzes were out of 20 points.
* For each class draw the histogram (x-axis from 0 -- 22, bar width 2 for all) and find the summary statistics.

Block 1:





Block 2:





Block 3:





**BOXPLOTS:**

Underneath each histogram draw the boxplot for the data, using the scale on the histogram x-axis as your number line.

Answer each of the following questions:

1. Looking at the **histogram**, what shape does Block 1’s distribution have? How can you see this in the boxplot?
2. Looking at the **histogram**, what shape does Block 2’s distribution have? How can you see this in the boxplot?
3. Looking at the **histogram**, what shape does Block 3’s distribution have? How can you see this in the boxplot?

Redraw all three boxplots below as parallel boxplots



Answer the following questions:

1. Which class had the most consistent scores? How can you tell?
2. Which class had the most variable scores? How can you tell?
3. Which pair of summary statistics (mean and std.dev., or Median and 5# summary) would best be used in describing the distribution for
   1. Block 1? b. Block 2? c. Block 3?
4. Describe & Compare Block 1 & 2